

Using an Evidence-Based Practice Model in Early Childhood Intervention

M'Lisa Shelden, PT, PhD

mshelden@puckett.org

Dathan Rush, MA, CCC-SLP

drush@puckett.org

<http://www.coachinginearlychildhood.org>

**What questions do you
have that you want us to
answer before we finish
today?**

What is the purpose of early childhood intervention?

Early childhood intervention is to support care providers in developing the competence and confidence to help the child learn.

Evidence-Based Practices

“Practices that are informed by research, in which the characteristics and consequences of environmental variables are empirically established and the relationship directly informs what a practitioner can do to produce a desired outcome.”

(Dunst, Trivette, & Cutspec, 2002)

Key Terminology

1. Building on **activity settings and learning opportunities** vs. embedding therapy.
2. Promoting **child participation** in **interest-based** activity settings that have development-enhancing qualities vs. focusing on skill development.
3. **Adult responsiveness** to the child vs. teaching the child specific skills.

Evidence-Based vs. Traditional Paradigm

Evidence-Based

- Promotion
- Capacity-building
- Strengths-based
- Resource-based
- Family-centered

Traditional

- Treatment
- Expertise
- Deficit-based
- Service-based
- Professionally-centered

(Dunst, 2000)

Treatment Models

Focus on remediation of a disorder, problem, or disease, or its consequences

Promotion Models

Focus on promoting
competence and positive
functioning

Expertise Models

Depend on professional
expertise to solve problems
for people

Capacity-Building Models

Provide opportunities for people to use existing abilities and develop new skills

Deficit-Based Models

Focus on correcting a person's weaknesses or problems

Strengths-Based Models

Acknowledge the assets of people and help them use these assets to improve functioning

Service-Based Models

Describe practices primarily
in terms of professional
services

Resource-Based Models

Describe practices in terms of a wide variety of formal and informal supports within a community

Informal Resources

- Family members
- Neighbors and friends
- Babysitter
- Playgroup parents
- Church or synagogue members
- Carpool partners

Formal Resources

- Early intervention programs
- Public health programs
- Respite programs
- Social service agencies
- Adult education programs
- Mental health programs
- Emergency or crisis services

Professionally-Centered Models

View professionals as experts who determine the needs of a person from their own as opposed to the other person's perspective

Family-Centered Models

View professionals as agents of families and responsive to family desires and priorities

Natural Learning Opportunities

- Everyday family and community activities, settings, experiences, and opportunities are important contexts for young children's acquisition of a variety of behavioral and developmental competencies

(Dunst, Bruder, Trivette, Raab, & McLean, 2001; Dunst, Hamby, et al., 2000; Gallimore et al., 1993; Göncü, 1999; Hart & Risley, 1995; Odom, Favazza, Brown, & Horn, 2000)

Natural Learning Opportunities

- Children's learning opportunities that are interest-based and provide contexts for asset expression are more likely to optimize learning and development

(Dunst, Bruder, et al., 2001; Dunst et al, 2000; Gallimore & Goldenberg, 1993; Gelman et al., 1991; Guberman, 1999; Nelson, 1999; Riksen-Walraven, 1978; Shelden & Rush, 2001)

Natural Learning Opportunities

- Contextually mediated skill development which is functional and social-adaptive permits young children greater opportunities to be involved in family and community activities

(Kellegrew, 1998; Stremel et al., 1992)

Possible Responses of Individuals to Anomalous Data

- **Ignore** the anomalous data
- **Reject** the data
- **Exclude** the data from the domain of theory
- Hold the data in abeyance (**Suspend**)
- **Reinterpret** the data **while retaining** theory A
- **Reinterpret** the data **and make** peripheral **changes** to theory A
- **Accept** the data and change theory

(Chinn & Brewer, 1993)

Phases in the Change Process

- Resistance – comes from fear
- Uncertainty – implementation dip
- Assimilation – experimentation
- Transference – new processes in place
- Integration – acceptance, exhilaration, and excitement

(Wilson, 1992)

Paradigm Shift

“...child participation in activity settings that have development-enhancing qualities and consequences is early intervention in the broadest sense of the term, even when it does not involve specially trained...professionals providing children learning opportunities.”

(Dunst, Hamby, Trivette, Raab, Bruder, 2000)

The Shift Continues...

"...conceptualizing early intervention in natural environments *solely* as early intervention services provided by qualified personnel in natural environments is both limited and limiting."

(Dunst, Hamby, Trivette, Raab, Bruder, 2000)

Consider this...

"It's important to remember that the amount of service is not what's important, because *all the child's learning occurs **between** sessions.*"

(McWilliam, 1996)

The Goal

Promoting the child's ability to "be and do" by facilitating the family's or care provider's ability to enhance the child's development using what *they* consider important.

The Strategy

Consider the activity settings that the family and care providers value to generate learning opportunities, then let the *learning opportunities* lead to *desired skills and behaviors*.

Natural Learning Environments (Activity Settings) are...

"...experiences and opportunities afforded developing children as part of daily living, child and family routines, family rituals, and family and community celebrations and traditions."

(Dunst, Hamby, Trivette, Raab, Bruder, 2000)

Bruder & Dunst (1999)

"...going from specific behaviors to learning activities seems to limit children's learning opportunities. Going from learning opportunities to behaviors seems to open up more different possibilities for learning" (p. 36).

Bruder & Dunst (1999)

“The life of a child is full of opportunities for learning...Virtually everything a child experiences happens as part of family life, community life, and participation in early childhood programs” (p.34).

"The family context includes..."

a mix of people and places that support a variety of ...learning opportunities...such as cooking, eating meals, splashing water during bath time, looking at books, and learning how to greet people at family get-togethers" (p.34).

(Bruder & Dunst, 1999)

Results of Research

Family Activity Settings

- Family Routines
- Parenting Routines
- Child Routines
- Literacy Activities
- Play Activities
- Physical Play
- Entertainment Activities
- Family Rituals
- Family Celebrations
- Socialization Activities
- Gardening Activities

(Dunst, Hamby, Trivette, Raab, Bruder, 2000)

"Community life includes..."

a mix of people and places...including the people and things encountered on a walk in the neighborhood, a visit to the library, or a shopping trip" (p.34).

(Bruder & Dunst, 1999)

Results of Research

Community Activity Settings

- Family Excursions
- Family Outings
- Play Activities
- Community Activities
- Outdoor Activities
- Recreation Activities
- Children's Attractions
- Art/Entertainment Activities
- Church/Religious Activities
- Organizations and Groups
- Sports Activities

(Dunst, Hamby, Trivette, Raab, Bruder, 2000)

Early childhood programs include...

- child care programs;
- early intervention and preschool programs;
- other early childhood experiences provided by professionals.

(Bruder & Dunst, 1999)

Palisano, Snider, & Orlin (2004)

“Ever-increasing knowledge of, research on, and awareness of the needs of children with CP and their families have contributed to ongoing advances in physical and occupational therapy. Current best practice emphasizes the child’s functional needs with the context of the family and participation in home, school, and community life” (p.74).

Definitions of Evaluation and Assessment According to Part C of IDEA

Evaluation: Procedures to determine a child's initial and continuing eligibility for services

Assessment: Ongoing procedures used to determine a child's and family's unique strengths and needs, and the services appropriate to meet those needs (program planning)

Rethinking Intervention

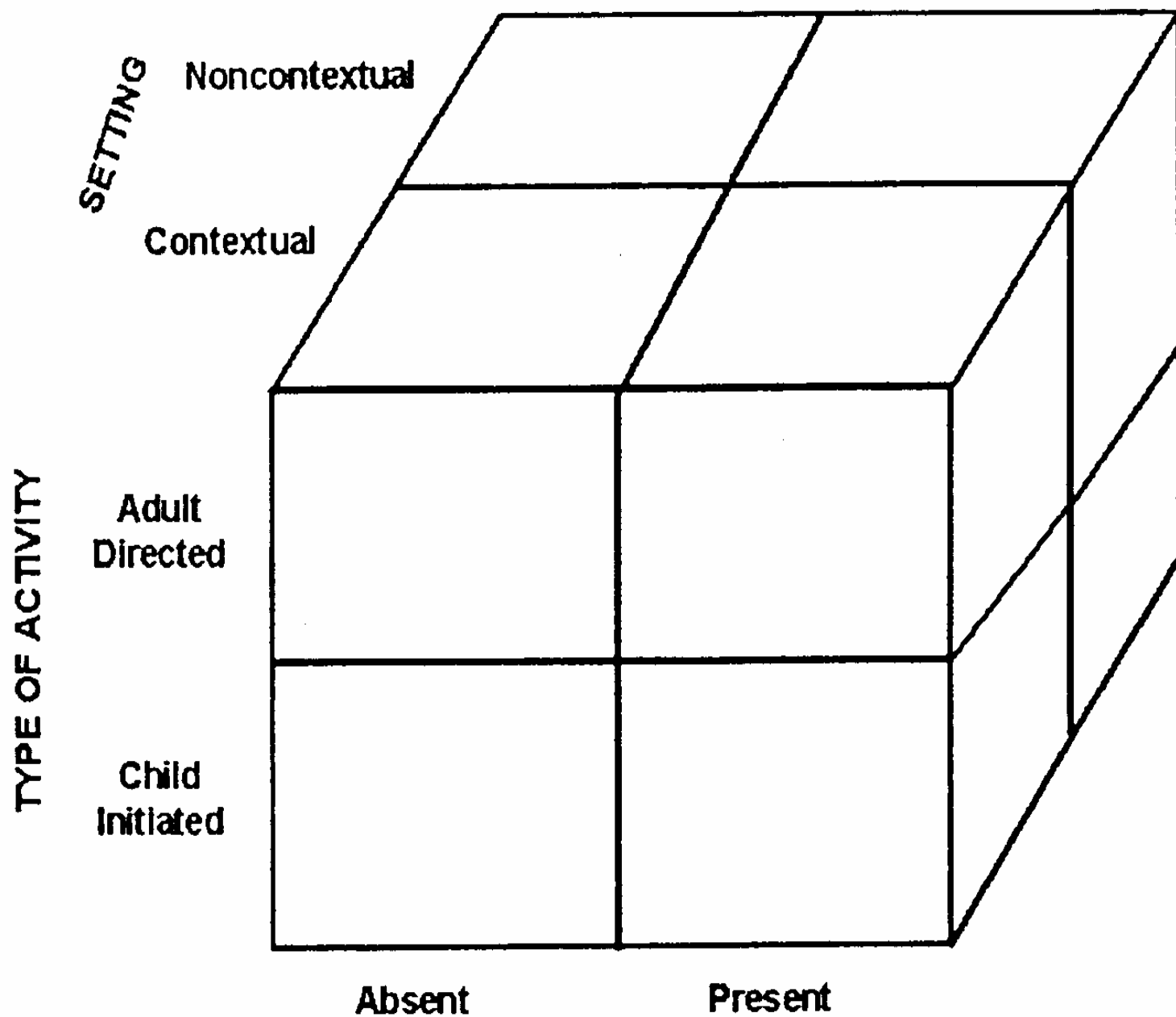


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Natural Learning Environment Practices

"...is a(n)...approach to intervention that uses everyday family and community activity as the sources (contexts) of child learning opportunities where child participation and competence enhancement is mediated by social and nonsocial experiences afforded a child in everyday activity." (p. 3)

(Dunst, 2001)



PRACTITIONER

(Dunst, et al., 2001)

The Setting...

Contextualized vs.
Decontextualized Learning

Embedding Therapy vs. Supporting Participation

Findings produced as part of a model demonstration project:

“Considerably more parents indicated that participation in community learning activities was associated with better child and parent/family benefits compared with participation in early childhood programs for infants, toddlers, and preschool-age children with disabilities (segregated programs).”

(Dunst, 2001)

Embedding Therapy vs. Supporting Participation

“To the extent that natural learning opportunities are viewed by the practitioners as including only or mostly more formal learning opportunities and their interactions with parents emphasize this as part of natural environment conversations, disagreements or misunderstandings are likely to ensue.”

(Dunst & Raab, 2004)

Embedding Therapy vs. Supporting Participation

“The delivery of [decontextualized, skill-based therapy and educational services] in a child’s home increased reports of negative well-being indicators.”

(Dunst, Brookfield, & Epstein, 1998)

Sources of Learning Opportunities



Natural Learning Opportunities

- Children benefit in multiple ways from intervention practices that use everyday activities as sources of competence-enhancing experiences

(Dunst, Bruder, et al., 2001; Kellegrew, 1998; Santos & Lignugaris/Kraft, 1997; Stremel et al., 1992)

Natural Learning Opportunities

- Everyday family and community activities, settings, experiences, and opportunities are important contexts for young children's acquisition of a variety of behavioral and developmental competencies

(Dunst, Bruder, Trivette, Raab, & McLean, 2001; Dunst, Hamby, et al., 2000; Gallimore et al., 1993; Göncü, 1999; Hart & Risley, 1995; Odom, Favazza, Brown, & Horn, 2000)

Let's talk about...

Competence-instigating and
competence-enhancing
characteristics

The type of activity...

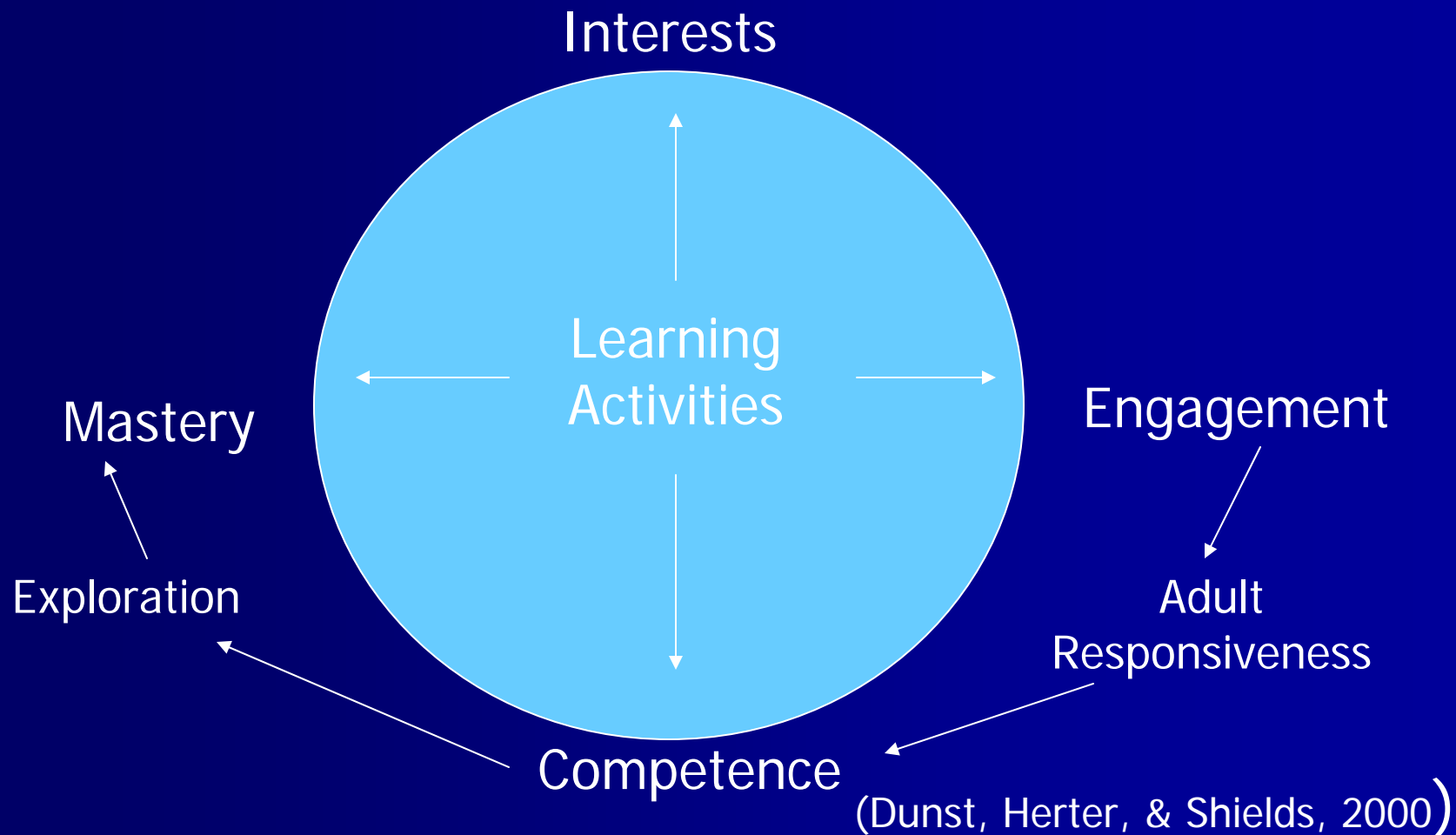
- child-initiated
- adult-initiated

Research and Practice Show...

...learning and development occurs more rapidly in young children when they are engaged in activities of interest to them, thus creating opportunities for them to practice existing skills, explore the environment, and learn new skills.

(Dunst, Bruder, Trivette, Raab, & McLean, 2001;
Dunst, Hamby, et al., 2000; Gallimore et al., 1993; Göncü, 1999;
Hart & Risley, 1995; Odom, Favazza, Brown, & Horn, 2000)

Context for Expressing Child Interest & Competence



Types of Experiences and Opportunities

Planned

Serendipitous

(Dunst, Hamby, Trivette, Raab, Bruder, 2000)

The practitioner role...

“place major emphasis on parent (care provider)-implemented practices where practitioners support and strengthen care providers’ capacity to provide the child everyday learning opportunities.” (p. 17)

(Dunst, 2001)

Frequency issues

- Two hours/week = 2% of total waking hours of a one year old child
- Diapering, feeding, playing=each happen at least 2000 times by the child is one year of age
- Just 20 everyday activities would equal 40,000 learning opportunities by age one.

(Dunst, 2001)

Outcome...

Promoting care provider competence and confidence to support the child's participation and learning for life roles!

Operationalizing Key Elements/Strategies

Strategies must:

- Be based on how all children learn throughout the course of everyday life, at home and in the community
- Focus on naturally occurring learning opportunities, rather than contrived, specialized instruction
- Support primary caregivers to provide children with learning experiences and opportunities that strengthen and promote a child's competence and development
- Support learning that occurs in context of the things that have high levels of interest and engagement for the child and family

(Hanft, Rush & Shelden, 2004)

Operationalizing Key Elements/Strategies

- Intervention sessions incorporate opportunities to reflect with the family on what is working and where additional problem solving may be needed as a means of enhancing the family's capacity and competence
- Helping families adapt interactions, actions, routines, environment, and schedule are key strategies used in implementing IFSPs

(Hanft, Rush & Shelden, 2004)

Coaching

The interaction style used by an early intervention practitioner to build the capacity of care providers to promote child learning and development in family, community, and early childhood settings.

Operational Definition of Coaching

An adult learning strategy in which the coach promotes the learner's ability to reflect on his or her actions as a means to determine the effectiveness of an action or practice and develop a plan for refinement and use of the action in immediate and future situations.

(Rush & Shelden, 2004)

Further Definition

Coaching in early childhood is an interactive process of observation and reflection in which the coach promotes the other person's ability to support the child in *being and doing*. *Being* with the partners in life who the child wants and needs to be with and *doing* what he wants and needs to do.

(Shelden & Rush, 2001)

For the Learner...

Coaching develops the competence and confidence to implement strategies to increase the child's learning opportunities and participation in daily life, knowing when the strategies are successful and making changes in current situations, as well as, generalizing solutions to new and different circumstances, people, and settings.

(Bruder & Dunst, 1999; Fenichel & Eggbeer, 1992; Flaherty, 1999; Kinlaw, 1999)

Goal of the Coach

The coach's goal for the learner is sustained excellent performance in which the learner has the competence and confidence to engage in self reflection, self correction, and generalization of new skills and strategies to other situations as appropriate.

Characteristics of Coaching

- ❖ Joint Planning
- ❖ Observation
- ❖ Action/Practice
- ❖ Reflection
- ❖ Feedback

But what do I do with my hands?

TWO reasons exist for hands-on...

- Assessment (to figure out what works)
- Modeling and teaching (to share new ideas with learners)

Team Models

- Multidisciplinary
- Interdisciplinary
- Transdisciplinary

The Approach to Teaming

- Research
 - Outcomes data
 - Cost benefit ratio
 - Family preferences vs. service provider preferences
- Federal Hearings (IDEA)

Multiple Providers

"The more [decontextualized, skill-based] services the child and family received, the less satisfied the respondents were with early intervention."

(Dunst, Brookfield, & Epstein, 1998)

Multiple Providers

"The more frequent contact early intervention practitioners had with both the child and the respondent, the fewer positive well-being indicators reported."

(Dunst, Brookfield, & Epstein, 1998)

Multiple Providers

"The longer a child and family received early intervention, the more negative the effect on global well-being."

(Dunst, Brookfield, & Epstein, 1998)

Multiple Providers

“The total amount of child and family services received was negatively related to both personal and family well-being; the more services received, the poorer parent and family functioning.”

(Dunst, Brookfield, & Epstein, 1998)

Multiple Providers

Preliminary survey data of a parent report of the helpfulness of early intervention providers indicate that 96% of the parents having one provider rated him/her as helpful, 77% of the parents having two providers rated them as helpful, and 69% of parents having three or more providers rated them as helpful ($p < .001$).

(Dunst & Bruder, 2004

Findings from National Survey of Service Coordination in Early Intervention (Research and Training Center on Service Coordination)

Operational Definition of the Primary Coach Approach

The primary coach approach to teaming is a family-centered process for supporting families of young children with disabilities in which one member of an identified multidisciplinary team is selected as the **team lead** who receives coaching from other team members, and uses coaching as the key intervention strategy to build the capacity of parents and other care providers to use everyday learning opportunities to promote child development.

Characteristics of Primary Coach Approach

- An identified team of individuals from multiple disciplines having expertise in child development, family support, and coaching is assigned to each family in the program.
- One team member serves as **team lead**.
- The **team lead** receives coaching from other team members through ongoing planned and spontaneous interactions.

Primary Coach Approach – Implementation Conditions

- All team members attend regular team meetings for the purpose of colleague-to-colleague coaching. Coaching topics at team meetings are varied and include specific information for supporting team members in their role as the **team lead**.

Primary Coach Approach – Implementation Conditions

- The **team lead** is selected based upon desired outcomes of the family, rapport/relationship between coach and learner, and knowledge and availability of the **team lead** and family.

Primary Coach Approach – Implementation Conditions

- Joint visits should occur at the same place and time whenever possible with/by other team members to support the **team lead**.

Primary Coach Approach – Implementation Conditions

- The **team lead** for a family should change as infrequently as possible. Justifiable reasons for changing the **team lead** include a request by a family member or other care provider due to a personality conflict; or when a **team lead** believes that even with coaching from other team members he or she is ineffective in supporting the care providers.

But...is it against your practice act?

“Although some physical therapists may remain apprehensive about liability when they engage in role release, we need to raise as much concern for *acts of omission* as *acts of commission*.” (p. 56).

(Rainforth, B., 1997)

Use of a Team Lead is not...

- “watered-down” approach.
- teaching the care provider to do therapy.
- a speech-language pathologist providing physical therapy.
- used because you don’t have a particular discipline available.
- used to save money.

Meet Destiny & Donna

Destiny

- 16 months old
- Lives with her mom in an apartment
- Attends *Granny's Giggles-n-Grins* child care
- Likes watching TV and being held
- Diagnosed with cytomegalovirus (CMV)
- Weighs 16 pounds
- Smiles at familiar people
- Needs help for moving
- Held for sitting, eating, bathing

Meet Destiny & Donna

Donna

- Works full-time outside of the home
- Likes to watch TV (especially daytime dramas and talk shows)
- Went to work full-time at age 15
- Does not drive and no public transportation is available
- Worried about Destiny's weight/eating
- Wants Destiny to walk and talk

Meet Destiny & Donna

Previous IFSP Outcomes:

- Destiny will roll from a supine to a prone position.
- Destiny will push up on extended arms in a prone position and hold the position.
- Destiny will have improved oral-motor control.
- Destiny will identify common objects.

Meet Destiny & Donna

Previous Service Delivery

- Had been in program for 5 months
- Received PT twice weekly for one hour sessions at the school
- Received speech once weekly for one hour sessions at home
- Received OT twice weekly for 45 minute sessions at the school

One possible solution...

New Outcomes:

- Destiny will play with her favorite toys while seated in her high chair, infant walker, and standing frame by July 4, 2004.
- Destiny will participate in mealtime by letting her mother know what bite of food she'd like next by Thanksgiving.
- Destiny will gain five pounds over the next six months.

Continued...

For the next six months we'll try:

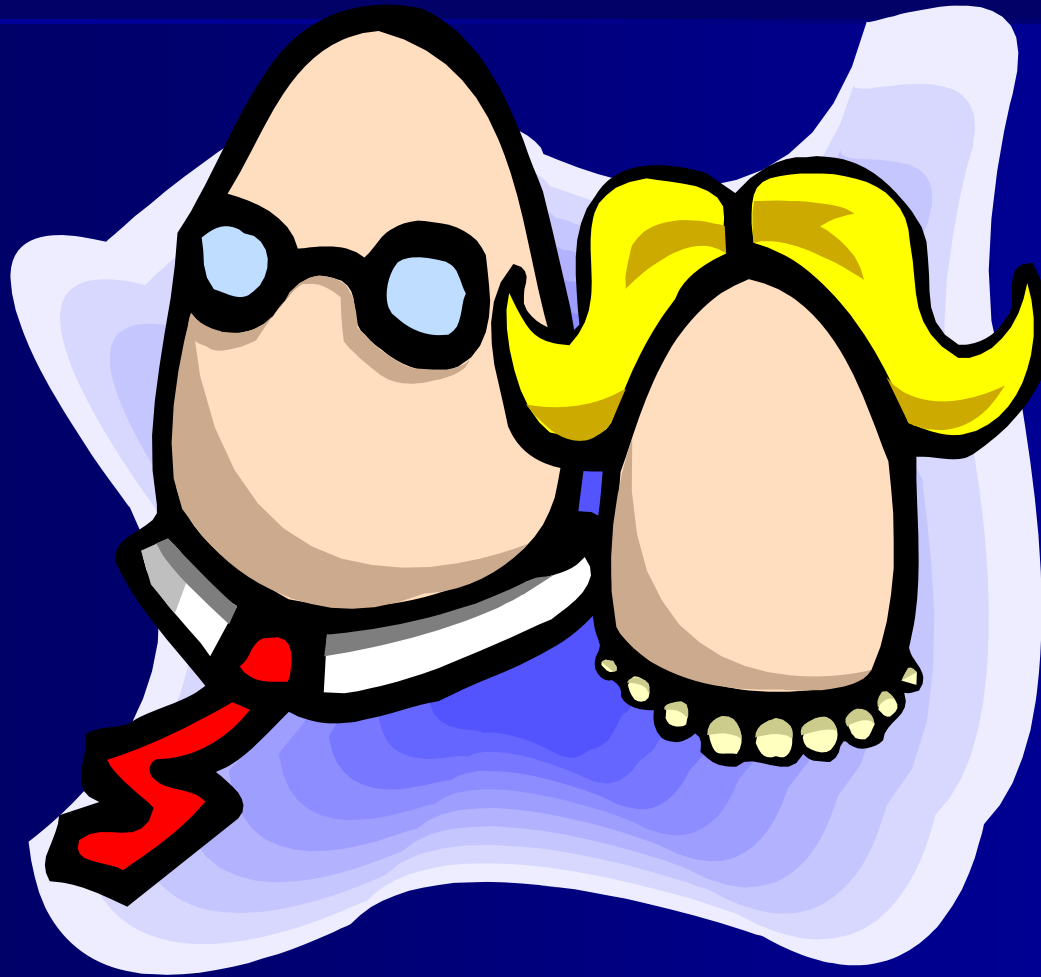
- OT will serve as team lead
- Visits will be provided in childcare setting and home
- 1st 2weeks: OT – 7, 1 hr visits
PT – 2, 1 hr visits
- 2nd 2weeks: OT – 4, 1 hr visits
PT – 1, 1 hr visits
- Months 2-3: OT – 10, 1 hr visits
PT – 2, 1 hr visits
SLP – 2, 1 hr visits
- Months 4-6: OT – 12, 1 hr visits
SLP – 4, 1 hr visits

Add it up...

Total hours over the 24 week period

- with multiple providers = 108
- with a team lead = 44

Questions & Final Thoughts...



Resources

See the attached list of references, in addition to:

<http://www.coachinginearlychildhood.org>

<http://www.disabilityisnatural.com>

<http://www.fippcase.org>

<http://www.poweroftheordinary.org>

<http://www.researchtopractice.info>